



12-13-04

1644
26

Express Mail No. EV 456 933 242 US

POWER OF ATTORNEY

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: Feder *et al.* Confirmation No.: 9646

Serial No.: 10/092,404 Art Unit: 1644

Filed: March 4, 2002 Examiner: VanderVegt, F. Pierre

For: METHOD AND COMPOSITIONS FOR
DIAGNOSIS AND TREATMENT OF IRON
OVERLOAD DISEASES AND IRON
DEFICIENCY DISEASES Attorney Docket No.: 8907-098-999

REVOCATION AND POWER OF ATTORNEY OR AUTHORIZATION OF AGENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Bio-Rad Laboratories, Inc., Assignee, hereby revokes any and all previous powers and appoints:

☒ Practitioners at Customer Number 20583

as its attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

Please direct all correspondence address for the above-identified application to:

☒ The above mentioned Customer Number.☒ Firm or Individual Name:Address: Jones Day, 222 East 41st Street, New York, New York 10017

Telephone: (212) 326-3939

I am the:

☐
☒

Applicant/Inventor

Assignee of record of the entire interest. See 37 CFR 3.71.

(Statement under 37 CFR 3.73(b) is applicable)

SIGNATURE of Applicant or Assignee of Record			
Date:	8-25-04	Signature:	
		Typed Name:	John J. Cassingham
		Position/Title:	Patent Counsel and Assistant Secretary
		Assignee:	Bio-Rad Laboratories, Inc.

Statement Under 37 C.F.R. 3.73(b)

Bio-Rad Laboratories, Inc., states that it is:

- ☒ the assignee of the entire right, title, and interest; or
☐ an assignee of less than the entire right, title and interest.
The extent (by, percentage) of its ownership interest is %

in the patent application/patent identified above by virtue of either:

- ☒ An assignment from the inventor(s) of the patent application/patent identified above, a copy which is attached hereto.

OR

- ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

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at Reel , Frame , or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

☐ Copies of assignments or other documents in the chain of title are attached.
[Note: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

ASSIGNEE:

Bio-Rad Laboratories, Inc.

Date: 8-25-04

Signature:



Typed Name:

John J. Cassingham

Position/Title:

Patent Counsel and Assistant Secretary

Note: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required.

☒ Total of 1 form is submitted.



12-13-04

1644

Express Mail No.: EV 456 932 750 US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: Feder et al. Confirmation No.: 9646

Serial No.: 10/092,404 Art Unit: 1644

Filed: March 4, 2002 Examiner: VanderVegt, F. Pierre

For: METHODS AND
COMPOSITIONS FOR
DIAGNOSIS AND TREATMENT
OF IRON OVERLOAD
DISEASES AND IRON
DEFICIENCY DISEASES Attorney Docket No: 8907-098-999

TRANSMITTAL

Commissioner for Patents
Mail Stop Post Issue
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

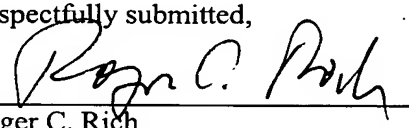
Transmitted herewith are the following documents in connection with the above-identified application:

- 1) Revocation and Power of Attorney or Authorization of Agent from Bio-Rad;
- 2) Revocation and Power of Attorney or Authorization of Agent from California Institute of Technology;
- 3) Copy of the official filing receipt;
- 4) Copies of three recorded assignments from parent application Number 09/094,964 filed June 12, 1998, now U.S. Patent 6,391,852 issued May 21, 2002:
 - a. From the inventors, Feder, John N., and Schatzman, Randall C. to Progenitor, Inc.;
 - b. From Progenitor, Inc. to Bio-Rad Laboratories, Inc.; and
 - c. From the inventor, Bjorkman, Pamela J. to California Institute of Technology
- 5) Change of Correspondence Address

No fee is believed to be due. The Commissioner is however authorized to charge all required fees, fees under 37 C.F.R. § 1.17 and all required extension of time fees, or credit any overpayment, to Jones Day Deposit Account No. 50-3013 (043018-999098).

Respectfully submitted,

Date: December 9, 2004


Roger C. Rich 54,398
For: Nikolaos C. George (Reg. No. 39,201)
JONES DAY
222 East 41st Street
New York, New York 10017
(212) 326-3939



Express Mail No. EV

US

POWER OF ATTORNEY

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: Feder et al.

Confirmation No.: 9646

Serial No.: 10/092,404

Art Unit: 1644

Filed: March 4, 2002

Examiner: VanderVegt, F. Pierre

For: METHODS AND COMPOSITIONS
FOR DIAGNOSIS AND
TREATMENT OF IRON
OVERLOAD DISEASES AND
IRON DEFICIENCY DISEASES

Attorney Docket No: 8907-098-999

REVOCATION AND POWER OF ATTORNEY OR AUTHORIZATION OF AGENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

California Institute of Technology, Assignee, hereby revokes any and all previous powers and appoints:

☒ Practitioners at Customer Number 20583

as its attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

Please direct all correspondence address for the above-identified application to:

☒ The above mentioned Customer Number.

☒ Firm or Individual Name:

Address: Jones Day, 222 East 41st Street, New York, New York 10017

Telephone: (212) 326-3939

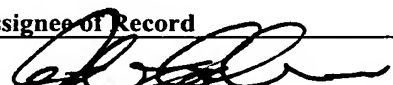
I am the:

☐
☒

Applicant/Inventor

Assignee of record of one-half interest. See 37 CFR 3.71.

(Statement under 37 CFR 3.73(b) is applicable)

SIGNATURE of Applicant or Assignee of Record			
Date:	NOV 19 2004	Signature:	
		Typed Name:	Adam Cochran
		Position/Title:	Intellectual Property Counsel Office of the General Counsel
		Assignee:	California Institute of Technology

Statement Under 37 C.F.R. 3.73(b)

California Institute of Technology, states that it is:

- ☐ the assignee of the entire right, title, and interest; or
☒ an assignee of less than the entire right, title and interest.
The extent (by, percentage) of its ownership interest is 50 %

in the patent application/patent identified above by virtue of either:

- ☒ An assignment from the inventor(s) of the patent application/patent identified above, a copy which is attached hereto.

OR

- ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

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☐ Additional documents in the chain of title are listed on a supplemental sheet.

☐ Copies of assignments or other documents in the chain of title are attached.
[Note: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

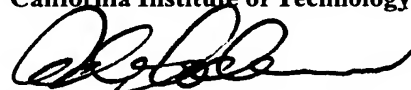
The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

ASSIGNEE:

California Institute of Technology

Date: NOV 19 2004

Signature:



Typed Name:

Adam Cochran
Intellectual Property Counsel
Office of the General Counsel

Position/Title:

Note: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required.

☐ Total of 1 form is submitted.



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COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, D.C. 20231
www.uspto.gov

APPLICATION NUMBER	FILING DATE	GRP ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO.	DRAWINGS	TOT CLAIMS	IND CLAIMS
12092,404 /	03/04/2002 /	1644 ✓	740 ✓	8907-098-999 ✓	5	3 ✓	3 ✓

CONFIRMATION NO. 9646 ✓

FILING RECEIPT



OC000000007861275

Date Mailed: 04/12/2002

Receipt is acknowledged of this nonprovisional Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Customer Service Center. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s) ✓

John N. Feder, San Carlos, CA; ✓
Pamela J. Bjorkman, Pasadena, CA; ✓
Randall C. Schatzman, Daly City, CA; ✓

Assignment For Published Patent Application

Bio-Rad Laboratories, Inc.;
California Institute of Technology;

Domestic Priority data as claimed by applicant

THIS APPLICATION IS A DIV OF 09/094,964 06/12/1998 ✓
WHICH IS A CIP OF 08/876,010 06/13/1997 ABN ✓

Foreign Applications

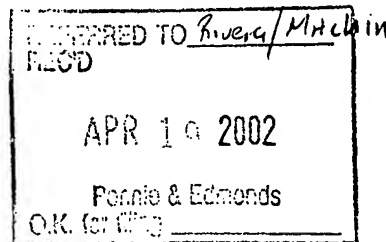
If Required, Foreign Filing License Granted 04/12/2002

Projected Publication Date: 07/25/2002

Non-Publication Request: No

Early Publication Request: No

Title



Methods and compositions for diagnosis and treatment of iron overload diseases and iron deficiency diseases

Preliminary Class

514

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Title 35, United States Code, Section 184
Title 37, Code of Federal Regulations, 5.11 & 5.15**

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NOT GRANTED

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MAY 24, 1999

PTAS

PENNIE & EDMONDS LLP
BRIAN M. POISSANT
1155 AVENUE OF THE AMERCIAS
NEW YORK, NY 10036



100980582A

8907-074

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NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

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PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 03/03/1999

REEL/FRAME: 9797/0082
NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

FEDER, JOHN N.

DOC DATE: 12/01/1998

ASSIGNOR:

SCHATZMAN, RANDALL C.

DOC DATE: 12/01/1998

ASSIGNEE:

PROGENITOR, INC
4040 CAMPBELL AVENUE
MENLO PARK, CALIFORNIA 94025

SERIAL NUMBER: 09094964

FILING DATE: 06/12/1998

PATENT NUMBER:

ISSUE DATE:

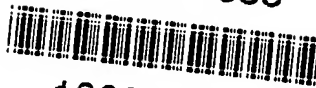
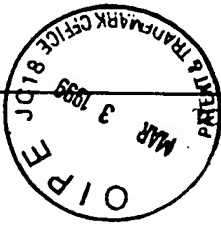
ANNE HARRELL, PARALEGAL
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

1000
NNS 258

REFERRED TO <u>Rosemarie</u> REC'D
JUN 01 1999
Pennie & Edmonds O.K. for filing

03-12-1999

Express Mail No. EL 236 252 029 US



100980582

Attorney Docket Number
8907-074-999THE HONORABLE COMMISSIONER OF PATENTS AND TRADEMARKS
Box Assignment
Washington, DC 20231

Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

John N. Feder and Randall C. Schatzman

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of conveyance:

- ☒ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Other _____

Execution Date: December 1, 1998

2. Name and address of receiving party(ies):

Name: PROGENITOR, INC.

Address: 4040 Campbell Avenue, Menlo Park, CA
94025

Country (if other than USA): _____

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: _____

A. Patent Application No.(s) 09/094,964

B. Patent No.(s) _____

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

PENNIE & EDMONDS LLP
1155 Avenue of the Americas
New York, NY 10036

6. Number of applications and patents involved: _____

7. Total fee (37 CFR 3.41):\$ 40
Please charge to the deposit account listed in Section 8.8. Deposit account number:
16-1150

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9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

by Norbert Stoll

Brian M. Poissant

28.462

Brian M. Poissant

Reg. No. 744,250

March 3, 1999

Name of Person Signing Reg. No.

Signature

Date

03/11/1999 DNGUYEN 00000013 161150 09094964

Total number of pages including cover sheet:

3

01 FEB 1999 40.00 CH

Mail documents to be recorded with required cover sheet information to:
Commissioner of Patents & Trademarks, Box Assignment
Washington, D.C. 20231

ASSIGNMENT

WHEREAS, WE, JOHN N. FEDER AND RANDALL C. SCHATZMAN, ASSIGNORS, citizens of the United States, residing at 1450 Chestnut Street, San Carlos, California, 94070; and 685-2 Mountain View Drive, Daly City, California, 94014, are the inventors of the invention in **METHODS AND COMPOSITIONS FOR DIAGNOSIS AND TREATMENT OF IRON OVERLOAD DISEASES AND IRON DEFICIENCY DISEASES** for which we have executed an application for a Patent of the United States

- ☒ which is identified by Pennie & Edmonds LLP docket No. 8907-074-999
☒ which was filed on June 13, 1997, Application No. 09/094,964

and WHEREAS, PROGENITOR, INC., having a principal place of business at 4040 Campbell Avenue, Menlo Park, CA 94025, ASSIGNEE is desirous of obtaining our entire right, title and interest in, to and under the said invention and the said application:

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to us in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, we, the said ASSIGNORS, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, our entire right, title and interest in, to and under the said invention, and the said United States application and all divisions, renewals and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may hereafter be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said United States application under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof;

AND WE HEREBY authorize and request the Commissioner of Patents and Trademarks of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE HEREBY covenant and agree that we have full right to convey the entire interest herein assigned, and that we have not executed, and will not execute, any agreement in conflict herewith.

AND WE HEREBY further covenant and agree that we will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said invention in all countries.

IN TESTIMONY WHEREOF, We hereunto set our hands and seals the day and year set opposite our respective signatures.

Date 12-1, 1998

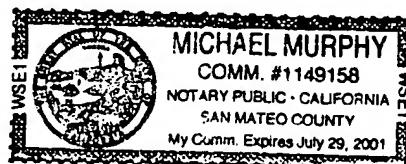
John N. Feder
John N. Feder

L.S.

State of CALIFORNIA
) SS.:
 County of SAN MATEO

On this 1ST day of DECEMBER, 1998, before me, a Notary Public in and for the State and County aforesaid, personally appeared John N. Feder, to me known and known to me to be the person of that name, who signed and sealed the foregoing instrument, and he acknowledged the same to be his free act and deed.

Michael Murphy
Notary Public.



Date 12/1, 1998

Randall C. Schatzman
Randall C. Schatzman

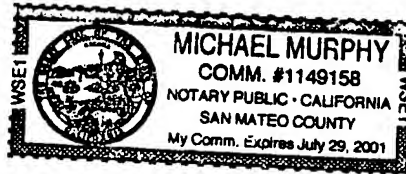
L.S.

State of CALIFORNIA)
County of SAN MATEO) SS.:

On this 1ST day of DECEMBER, 1998, before me, a Notary Public in and for the State and County aforesaid, personally appeared Randall C. Schatzman, to me known and known to me to be the person of that name, who signed and sealed the foregoing instrument, and he acknowledged the same to be his free act and deed.

Michael Murphy

Notary Public.





UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
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Washington, D.C. 20231

MAY 08, 2000

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PENNIE & EDMONDS LLP
BRIAN M. POISSANT
1155 AVENUE OF THE AMERICAS
NEW YORK, NY 10036

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RECORDATION DATE: 02/04/2000

REEL/FRAME: 010598/0014
NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:
PROGENITOR, INC.

DOC DATE: 03/24/1999

ASSIGNEE:
BIO-RAD LABORATORIES, INC.
1000 ALFRED NOBEL DRIVE
HERCULES, CALIFORNIA 94547

FILING DATE: 02/04/2000
ISSUE DATE:

✓ SERIAL NUMBER: 09497957 8907-046
PATENT NUMBER:

FILING DATE: 05/08/1995
ISSUE DATE: 05/19/1998

✓ SERIAL NUMBER: 08436074 8907-046
PATENT NUMBER: 5753438

FILING DATE: 02/09/1996
ISSUE DATE: 01/06/1998

✓ SERIAL NUMBER: 08599252 8907-049
PATENT NUMBER: 5705343

FILING DATE: 04/16/1996
ISSUE DATE: 01/27/1998

✓ SERIAL NUMBER: 08632673 8907-051
PATENT NUMBER: 5712098

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PENNIE & EDMONDS

MAY 24 2000
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CA OFFICE

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MAY 22 2000
Pennie & Edmonds O.K. for filing _____

SERIAL NUMBER: 08652265
PATENT NUMBER: 6025130

8907-053

FILING DATE: 05/23/1996 ✓
ISSUE DATE: 02/15/2000 ✓

SERIAL NUMBER: 08724394
PATENT NUMBER: 5872237

8907-054

FILING DATE: 10/01/1996 ✓
ISSUE DATE: 02/16/1999 ✓

SERIAL NUMBER: 08834497
PATENT NUMBER:

8907-056

FILING DATE: 04/04/1997 ✓
ISSUE DATE:

SERIAL NUMBER: 08852495
PATENT NUMBER:

8907-057

FILING DATE: 05/07/1997 ✓
ISSUE DATE:

SERIAL NUMBER: 08867010
PATENT NUMBER:

8907-058
08/276.010?

FILING DATE: 06/02/1997 ✓
ISSUE DATE:

SERIAL NUMBER: 08920559
PATENT NUMBER:

8907-062

FILING DATE: 08/27/1997 ✓
ISSUE DATE:

SERIAL NUMBER: 09094964
PATENT NUMBER:

8907-074

FILING DATE: 06/12/1998 ✓
ISSUE DATE:

SERIAL NUMBER: 09216077
PATENT NUMBER:

8907-076

FILING DATE: 12/18/1998 ✓
ISSUE DATE:

SHARON LATIMER, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
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Washington, D.C. 20231



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AUTHORIZATION TO CHARGE ADDITIONAL FEES TO DEPOSIT ACCOUNT

MAY 08, 2000

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CHARGE THE DEPOSIT ACCOUNT LISTED BELOW ADDITIONAL FEE(S) AS INDICATED BELOW. AUTHORIZATION TO CHARGE ADDITIONAL FEES HAS BEEN PROVIDED PER THE ATTACHED COVER SHEET, OR BY DIRECT CONTACT WITH THE CUSTOMER.

DEPOSIT ACCOUNT NUMBER: 116115
PROPERTY NUMBER: 09497957

RECORDING FEES:

FEE CODE: 581 AMOUNT: 40

IF YOU HAVE ANY QUESTIONS REGARDING THIS NOTICE, YOU MAY CONTACT THE INDIVIDUAL WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723.

SHARON LATIMER, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

TRADEMARK SERVICE FEES:

FEE CODE:

RECORDING FIRST MARK	481
RECORDATION SECOND AND SUBSEQUENT MARK IN SAME DOCUMENT	482
LABOR CHARGES FOR SERVICES PER HOURS OR FRACTION THEREOF	484
UNSPECIFIED OTHER SERVICES	485

PATENT SERVICE FEES:

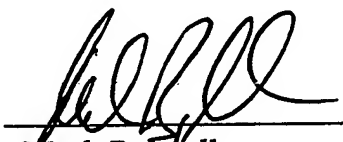
RECORDING EACH PATENT ASSIGNMENT,	581
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AGREEMENT, OTHER PAPER, PER PROPERTY	
LABOR CHARGES FOR SERVICES PER HOUR	584
(\$30) OR FRACTION THEREOF	
UNSPECIFIED OTHER SERVICES	585

successors and assigns, to obtain and enforce proper patent protection for the invention in the United States and any foreign country, it being understood that any expense incident to the execution of such papers shall be borne by BIO-RAD, its successors and assigns.

IN WITNESS WHEREOF, each party has caused its authorized representative to execute this Assignment.

PROGENITOR, INC.

By: 
Name: Mark Baghall
Title: Vice President and Chief Financial Officer
Date: 3/24/99

03-14-2000

ET

Attorney Docket Numbers

; 8907-049-999; 8907-052-999; 8907-053-999;
 ; 8907-056-999; 8907-057-999; 8907-059-999;
 8907-062-999; 8907-074-999; 8907-076-999

24-00



101287450

TO THE HONORABLE COMMISSIONER OF PATENTS AND TRADEMARKS

Box Assignment
 Washington, DC 20231

Please record the attached original documents or copy thereof.

10675 U.S. PTO
 09/497957
 02704788

1. Name of conveying party(ies):

Progenitor, Inc.

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

2. Name and address of receiving party(ies):

Name: Bio-Rad Laboratories, Inc.

Address: 1000 Alfred Nobel Drive
 Hercules, CA 94547

Country (if other than USA):

3. Nature of conveyance:

- ☒ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Other _____

Execution Date: March 24, 1999

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: _____

A. Patent Application No.(s)

B. Patent No.(s)

08/436,074 (now US 5,753,438); 08/599,252 (now US
 5,705,343); 08/632,673 (now US 5,712,098); 08/652,265,
 08/724,394 (now US 5,872,237); 08/834,497; 08/852,495;
 08/867,010; 08/920,559; 09/094,964; 09/216,077

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

PENNIE & EDMONDS LLP
 1155 Avenue of the Americas
 New York, NY 10036

6. Number of applications and patents involved: 11

7. Total fee (37 CFR 3.41): \$ 440.00
 Please charge to the deposit account listed in Section 8.

8. Deposit account number:
 16-1150

03/09/2000 DNGUYEN 00000143 161150 09497957

01 FC:58 40.00 CH

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9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Brian M. Poissant 28,462
 Name of Person Signing Reg. No.

Signature

Brian M. Poissant
 By: [Signature] 42067

Date

Jan. 6, 2000

Total number of pages including cover sheet:

5

ASSIGNMENT

WHEREAS, Progenitor, Inc., a Delaware corporation having offices at 4040 Campbell Avenue, Menlo Park, California 94025 ("PROGENITOR"), owns, by assignment, all right, title, and interest in those patents and patent applications set forth on Exhibit A hereto and all inventions claimed therein (the "PROGENITOR PATENTS"); and Bio-Rad Laboratories, Inc., a Delaware corporation having offices at Corporate Offices, 1000 Alfred Nobel Drive, Hercules, California 94547 ("BIO-RAD"), desires to acquire PROGENITOR's entire right, title, and interest in and to the PROGENITOR PATENTS.

NOW THEREFORE, be it known that, in consideration of one dollar (\$1.00) and other good and valuable consideration, receipt of which is hereby acknowledged, PROGENITOR hereby sells, assigns, transfers, and sets over to BIO-RAD, its lawful successors and assigns, PROGENITOR's entire right, title, and interest in and to the PROGENITOR PATENTS and all inventions disclosed therein, and all letters patent of the United States that may be granted thereon, and all reissues, reexaminations, and extensions thereof; and all rights to claim priority on the basis of all such patents and patent applications, and all applications for letters patent claiming priority from the PROGENITOR PATENTS that have been or may be filed in any foreign country and all such letters patent that may be granted thereon in any foreign country, and all extensions, renewals, and reissues thereof; and PROGENITOR hereby authorizes and requests the Commissioner of Patents and Trademarks of the United States and any official of any foreign country whose duty it is to issue patents on applications as described above, to issue all letters patent for this invention to BIO-RAD, its successors and assigns, in accordance with the terms of this Assignment;

AND, PROGENITOR HEREBY further covenants that PROGENITOR has the full right to convey the interest assigned by this Assignment, PROGENITOR will take all action and execute all documents necessary to perfect the interest assigned hereby, and PROGENITOR has not executed and will not execute any agreement in conflict with this Assignment;

AND, PROGENITOR HEREBY further covenants and agrees that PROGENITOR, through its officers and employees, will, without further consideration, communicate with BIO-RAD, its successors and assigns, any facts known to PROGENITOR and its officers and employees respecting the invention and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver all papers that may be necessary or desirable to perfect the title to the invention in said BIO-RAD, its successors and assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths, and generally do everything possible to aid BIO-RAD, its



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

MARCH 31, 2000

PTAS



101247536A

PENNIE & EDMONDS LLP
BRIAN M. POISSANT
1155 AVENUE OF THE AMERICAS
NY, NY 10036

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 01/06/2000

REEL/FRAME: 010489/0178
NUMBER OF PAGES: 5

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:
PROGENITOR, INC.

DOC DATE: 03/24/1999

ASSIGNEE:
BIO-RAD LABORATORIES, INC.
1000 ALFRED NOBEL DRIVE
HERCULES, CALIFORNIA 94547

SERIAL NUMBER: 08436074 ✓ 8907-046
PATENT NUMBER: 5753438 ✓

FILING DATE: 05/08/1995
ISSUE DATE: 05/19/1998

SERIAL NUMBER: 08599252 ✓ 8907-049
PATENT NUMBER: 5705343 ✓

FILING DATE: 02/09/1996
ISSUE DATE: 01/06/1998

SERIAL NUMBER: 08632673 ✓ 8907-052
PATENT NUMBER: 5712098 ✓

FILING DATE: 04/16/1996
ISSUE DATE: 01/27/1998

SERIAL NUMBER: 08652265 ✓ 8907-053 ?
PATENT NUMBER: 6025130 ✓

FILING DATE: 05/23/1996
ISSUE DATE: 02/15/2000

RECEIVED
PENNIE & EDMONDS

APR 07 2000

CA OFFICE

REFERRED TO <i>10/17/00</i> REC'D
APR 06 2000
Pennie & Edmonds O.K. for filing _____

SERIAL NUMBER: 08724394-8907-054-41
PATENT NUMBER: 58722371

FILING DATE: 10/01/1996
ISSUE DATE: 02/16/1999

SERIAL NUMBER: 08834497 8907-056-999
PATENT NUMBER:

FILING DATE: 04/04/1997
ISSUE DATE:

SERIAL NUMBER: 08852495 ✓ 8907-057-999
PATENT NUMBER:

FILING DATE: 05/07/1997
ISSUE DATE:

SERIAL NUMBER: 08867010 ✓ 8907-059-999
PATENT NUMBER:

FILING DATE: 06/02/1997
ISSUE DATE:

SERIAL NUMBER: 08920559 8907-062-999?
PATENT NUMBER:

FILING DATE: 08/27/1997
ISSUE DATE:

SERIAL NUMBER: 09094964 ✓ 8907-071-999
PATENT NUMBER:

FILING DATE: 06/12/1998
ISSUE DATE:

SERIAL NUMBER: 09216074 8907-076-999?
PATENT NUMBER:

FILING DATE: 12/18/1998
ISSUE DATE:

KIMBERLY WHITE, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

MAIL DATE U.
JAN 10 2000
PATENT & TRADEMARK OFFICE
MAY 1/56/00

1012410
8907-046-999; 8907-049-999; 8907-052-999; 8907-053-999;
8907-054-999; 8907-056-999; 8907-057-999; 8907-059-999;
8907-062-999; 8907-074-999; 8907-076-999

TO THE HONORABLE COMMISSIONER OF PATENTS AND TRADEMARKS
Box Assignment
Washington, DC 20231

Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

Progenitor, Inc.

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of conveyance:

☒ Assignment

☐ Merger

☐ Security Agreement

☐ Change of Name

☐ Other

Execution Date: March 24, 1999

2. Name and address of receiving party(ies):

Name: Bio-Rad Laboratories, Inc.

Address: 1000 Alfred Nobel Drive
Hercules, CA 94547

Country (if other than USA):

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No.(s)

B. Patent No.(s)

08/436,074 (now US 5,753,438); 08/599,252 (now US
5,705,343); 08/632,673 (now US 5,712,098); 08/652,265,
08/724,394 (now US 5,872,237); 08/834,497; 08/852,495;
08/867,010; 08/920,559; 09/094,964; 09/216,077

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

PENNIE & EDMONDS LLP
1155 Avenue of the Americas
New York, NY 10036

6. Number of applications and patents involved: 11

7. Total fee (37 CFR 3.41):.....\$ 440.00
Please charge to the deposit account listed in Section 8.

8. Deposit account number:
16-1150

01/10/2000 DNGUYEN 00000103 161150 08436074

01 FC:581 440.00 CH

DO NOT USE THIS SPACE

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Brian M. Poissant

28,462

Name of Person Signing

Reg. No.

Signature

Date

Total number of pages including cover sheet:

5

Mail documents to be recorded with required cover sheet information to:
Commissioner of Patents & Trademarks, Box Assignment
Washington, D.C. 20231

ASSIGNMENT

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AND, PROGENITOR HEREBY further covenants that PROGENITOR has the full right to convey the interest assigned by this Assignment, PROGENITOR will take all action and execute all documents necessary to perfect the interest assigned hereby, and PROGENITOR has not executed and will not execute any agreement in conflict with this Assignment;

AND, PROGENITOR HEREBY further covenants and agrees that PROGENITOR, through its officers and employees, will, without further consideration, communicate with BIO-RAD, its successors and assigns, any facts known to PROGENITOR and its officers and employees respecting the invention and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver all papers that may be necessary or desirable to perfect the title to the invention in said BIO-RAD, its successors and assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths, and generally do everything possible to aid BIO-RAD, its

successors and assigns, to obtain and enforce proper patent protection for the invention in the United States and any foreign country, it being understood that any expense incident to the execution of such papers shall be borne by BIO-RAD, its successors and assigns.

IN WITNESS WHEREOF, each party has caused its authorized representative to execute this Assignment.

PROGENITOR, INC.

By: 

Name: Mark Baghall

Title: Vice President and Chief Financial Officer

Date: 3/24/99

EXHIBIT A
TO
ASSIGNMENT
BETWEEN PROGENITOR, INC. AND BIO-RAD LABORATORIES, INC.

I. U.S. PATENTS AND PATENT APPLICATIONS

<u>Inventor</u>	<u>Serial No.</u>	<u>Filed</u>	<u>Title</u>
Drayna et al.	08/436,074	05/08/95	Method to Diagnose Hereditary Hemochromatosis
Drayna et al.	08/599,252	02/09/96	Method to Diagnose Hereditary Hemochromatosis
Tsuchihashi et al.	08/632,673	04/16/96	Hereditary Hemochromatosis Diagnostic Markers and Diagnostic Methods
mas et al.	08/652,265	05/23/96	Hereditary Hemochromatosis Gene
Feder et al.	08/724,394	10/01/96	Megabase Transcript Map: Novel Sequences and Antibodies Thereeto
Thomas et al.	08/834,497	04/04/97	Hereditary Hemochromatosis Gene
Ruddy and Wolff	08/852,495	05/07/97	Polymorphisms in the Region of the Human Hemochromatosis Gene
Feder et al.	08/867,010 08/876,010	06/13/97	Methods and Compositions for Diagnosis and Treatment of Iron Overload Diseases
Feder et al.	08/920,559	08/27/97	Methods and Compositions for Diagnosis and Treatment of Iron Misregulation Diseases
Feder et al.	09/094,964	06/12/98	Methods and Compositions for Diagnosis and Treatment of Iron Overload Diseases and Iron Deficiency Diseases
Feder et al.	09/216,077	12/18/98	Peptides and Peptide Analogues Designed from HFE Protein and Their Uses in the Treatment of Iron Overload Disease

D. Shinn
DOUGLASS GIVEN
PRESS, DSU
PROGENITOR, INC
5/31/00

II. FOREIGN PATENTS AND PATENT APPLICATIONS

<u>Country</u>	<u>Application No.</u>	<u>Filed</u>
Canada	2,220,293	05/08/96
Australia	58559/96	05/08/96
South Africa	96/3639	05/08/96
EPO	96920167.2	05/08/96
US	PCT/US96/06583	05/08/95
South Africa	97/6370	03/19/97
South Africa	97/8804	10/01/97
PCT	PCT/US97/17658	09/30/97
Canada		04/04/97
Australia	26701/97	04/04/97
EPO	97918642.6	04/04/97
T	PCT/US97/06254	04/04/97
PCT	PCT/US98/12436	06/12/98



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

MAY 24, 1999

PENNIE & EDMONDS LLP
BRIAN M. POISSANT
1155 AVENUE OF THE AMERICAS
NEW YORK, NY 10036

PTAS



100980583A

JUN - 1999
258 - 1115

8907 - 074

UNITED STATES PATENT AND TRADEMARK OFFICE
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PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 03/03/1999

REEL/FRAME: 9797/0092
NUMBER OF PAGES: 2

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

BJORKMAN, PAMELA J.

DOC DATE: 02/23/1999

ASSIGNEE:

CALIFORNIA INSTITUTE OF TECHNOLOGY
1200 E. CALIFORNIA BOULEVARD
PASADENA, CALIFORNIA 91125

SERIAL NUMBER: 09094964
PATENT NUMBER:

FILING DATE: 06/12/1998
ISSUE DATE:

LENELL MACKALL, PARALEGAL
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

REFERRED TO <u>Rosemary</u> REC'D
JUN 01 1999
Pennie & Edmonds O.K. for filing

03-12-1999

Ex. s Mail No. EL 236 252 029 US



100980583

Attorney Docket Number
8907-074-999TO THE HONORABLE COMMISSIONER OF PATENTS AND TRADEMARKS
Box Assignment
Washington, DC 20231

Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

Pamela J. Bjorkman

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

2. Name and address of receiving party(ies):

Name: California Institute of TechnologyAddress: 1200 E. California Boulevard
Pasadena, California 91125

Country (if other than USA): _____

3. Nature of conveyance:

☒ Assignment☐ Merger☐ Security Agreement☐ Change of Name☐ Other _____Execution Date: February 23, 1999

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: _____

A. Patent Application No.(s) 09/094,964

B. Patent No.(s) _____

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

PENNIE & EDMONDS LLP
1155 Avenue of the Americas
New York, NY 10036

6. Number of applications and patents involved: _____

7. Total fee (37 CFR 3.41):.....\$ 40
Please charge to the deposit account listed in Section 8.

8. Deposit account number:

16-1150

DO NOT USE THIS SPACE

9. Statement and signature.

*To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.*Brian M. Poissant28.462Brian M. PoissantMarch 3, 1999

Name of Person Signing Reg. No.

Signature

Date

Total number of pages including cover sheet:

2

Mail documents to be recorded with required cover sheet information to:
Commissioner of Patents & Trademarks, Box Assignment
Washington, D.C. 20231

ASSIGNMENT

SOLE

WHEREAS, I, PAMELA J. BJORKMAN, ASSIGNOR, citizen of the United States, residing at 1630 Casa Grande Street, Pasadena, California, 91104, am the inventor of the invention in **METHODS AND COMPOSITIONS FOR DIAGNOSIS AND TREATMENT OF IRON OVERLOAD DISEASES AND IRON DEFICIENCY DISEASES** for which I have executed an application for a Patent of the United States

☐ which is executed on ☐ even date herewith or ☐ _____ (date)

☒ which is identified by Pennie & Edmonds LLP docket No. 8907-074-999

☒ which was filed on June 13, 1997, Application No. 09/094,964

and WHEREAS, CALIFORNIA INSTITUTE OF TECHNOLOGY, having a principal place of business at 1200 E. California Boulevard, Pasadena, California, 91125, ASSIGNEE is desirous of obtaining my entire right, title and interest in, to and under the said invention and the said application:

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to me in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, I, the said ASSIGNOR, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, my entire right, title and interest in, to and under the said invention, and the said United States application and all divisions, renewals and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may hereafter be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said United States application under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof;

AND I HEREBY authorize and request the Commissioner of Patents and Trademarks of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND I HEREBY covenant and agree that I have full right to convey the entire interest herein assigned, and that I have not executed, and will not execute, any agreement in conflict herewith.

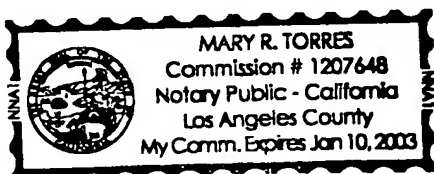
AND I HEREBY further covenant and agree that I will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to me respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said invention in all countries.

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 23rd day of February, 1998⁹

Pamela Bjorkman L.S.
Pamela J. Bjorkman

State of California)
County of Los Angeles) SS.:

On this 23rd day of February, 1998⁹, before me, a Notary Public in and for the State and County aforesaid, personally appeared Pamela J. Bjorkman, to me known and known to me to be the person of that name, who signed and sealed the foregoing instrument, and she acknowledged the same to be her free act and deed.



Mary R. Torres
Notary Public.